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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,992	12/29/2003	Steven Maurice Sikorski	1595	8250

23623 7590 01/22/2008

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EXAMINER	
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ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
01/22/2008	ELECTRONIC

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/748,992
Filing Date: December 29, 2003
Appellant(s): SIKORSKI, STEVEN MAURICE

Himanshu S. Amin (40,894)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/30/2007 appealing from the Office action mailed 06/14/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

Examiner withdraws the 35 U.S.C. 112, second paragraph, concerning claim 22.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,707,581 B1	BROWNING	03-2004
2004/0201595 A1	MANCHESTER	10-2004
2002/0186878 A1	HOON ET AL.	12-2002
2003/0144793 A1	MELAKU ET AL.	07-2003
2004/0036712 A1	CARDNO	02-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims **18-21**, **23**, **24**, **29-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Manchester (2004/0201595 A1).

Browning teaches the limitations of claims 18-21, 23, 24, 29-37 with the exception of disclosing an orientation component that orients the images on the display in view of the user regardless of the position of the device. However, Manchester teaches a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

In regards to claim **18**, the invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner (said ***mobile device***) [col. 2, lines 38-49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan

head (16) (said ***image capture component***) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (said ***display***). Referring to Fig. 3, the scan head (16), decoder, and other integrated circuits are controlled by means of a microprocessor that is programmed with instructions to carry out the method of Browning (said ***analysis component***) [col. 3 lines 48-51]. The electrical signals generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [col. 3 lines 7-9] for subsequent presentation to a companion information-retrieval agent [col. 3 lines 31-33]. Thus in order to correctly retrieve the correct information related to the barcode, the method/system of Browning must be able to rotate/invert the barcode when the user is holding the handheld scanner at odd angels or even upside down. Thus, it can capture the correct orientation of the barcode regardless of how the user is holding the handheld scanner (said ***capture corresponds to inversion/rotation***). The handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image [col. 4 lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4 lines 21-23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt (said ***determines product identity***) [col. 5 lines 31-32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent

either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient [col. 5 lines 33-34].

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (said ***a mobile device***) [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (said ***rotates information to an optimal viewing orientation***) [0025]. The display image (14) may be in the form of a graphic display image, a textual display image, a video display image, and a functional control button (18), or a combination thereof. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text

display type is provided by the display image portion (14b) [0022]. Manchester includes an authentication component by analyzing the sensed image, which is sensed by the camera (16b) [0036]. The sensed image maybe analyzed for key features [0036].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to orient the display of Browning with the invention of Manchester because the display image becomes difficult to read/see when the display device is turned or rotated [Manchester 0003]. Thus, by reorienting the display, in relation to how the user is holding such device, the display becomes easier to read.

In regards to claim **19**, Browning teaches the scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (said ***display***). Thus, the signals (said ***optical signals***) from the scan head are sent to the display to display an image of the product associated with barcode product identifier on a label that was scanned.

In regards to claim **20**, Browning teaches the scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (said ***display***). Thus, the signals (said ***optical signals***) from the scan head are

sent to the display to display an image of the product associated with barcode product identifier on a label that was scanned. Additionally, Manchester teaches the display image (14) may be in the form of a graphic display image, a textual display image, a video display image, and a functional control button (18), or a combination thereof. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text display type is provided by the display image portion (14b) [0022]. The same rationale for combining as applied to claim 18 is incorporated herein.

In regards to claim **21**, Manchester teaches the display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (said ***rotating information***) [0025]. The same rationale for combining as applied to claim 18 is incorporated herein.

In regards to claim **23**, Browning teaches the scanner can include a speaker (27) which provides audible feedback to the user [col. 3 lines 41-47]. The claim language recites comprising a keypad, a touch screen or an audio/voice recognition component that provides feedback or input to the system, which limits the claim to needing only one of

the limitations listed. Thus, the speaker providing audible feedback teaches such limitations

In regards to claim **24**, Browning teaches the scanner can include a speaker (27) which provides audible feedback to the user [col. 3 lines 41-47].

In regards to claim **29**, claim 29 recites the same limitations as claim 18. Therefore, the same rationale used for claim 18 is applied. Furthermore, Browning teaches the handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image (said ***data retrieval***) [col. 4 lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4 lines 21-23].

In regards to claim **30**, claim 30 recites the same limitations as claim 19. Therefore, the same rationale used for claim 19 is applied.

In regards to claim **31**, Browning teaches by scanning a bar-coded label on a product, the system enables the user to connect to a web site hosted by the manufacturer of that product, to obtain additional information about the product or other products by that manufacturer. Furthermore, the internal database could directly provide the user with a limited amount of information about the product, e.g., suggested retail price. If the user

desires additional information, a connection to the web site associate with that product can be initiated. The scanner can be used to input information about a product to a buying service or the like. For instance, when a product's bar-coded label is scanned, information about that product can be transmitted to the buying service, along with the indication of the user's desire to purchase that product [col. 7 lines 18-43]. Additionally, to facilitate later cataloguing and retrieval of scanned information, the scanner can include a clock which the microprocessor employs to stamp each stored entry with an associated data and time, which information is also presented to the information-retrieval agent, where the retrieval agent allows the user to view the scanned information and group by relevance, date and time, priority or topic [col. 3 lines 50-60]. Although Browning does not specifically disclose market share values of the scanned product, it would have been obvious to one of ordinary skill in the art that with the capability of the connection to the web site, such information can easily be obtained.

In regards to claim **32**, information can also be directly stored in the handheld scanner of Browning [col. 4 lines 21-23]. Additionally, in a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient [col. 5 lines 33-34].

In regards to claim **33**, the electrical signals generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [col. 3 lines 7-9] for subsequent presentation to a companion information-retrieval agent [col. 3 lines 31-33]. The

handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image [col. 4 lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4 lines 21-23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt [col. 5 lines 31-32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient [col. 5 lines 33-34].

In regards to claims **34** and **35**, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. With reference to Fig. 8, the sensors (16) (said ***sensor component***) can be positioned on the viewer (36) and/or on the display device (12) to sense the orientation of the viewer and/or display device (said ***according to user state***) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (said ***customizing viewing***

position) [0025]. The same rationale for combining as applied to claim 18 is incorporated herein.

In regards to claim **36**, with reference to Fig. 8 of Manchester, the sensors (16) can be positioned on the viewer (36) and/or on the display device (12) to sense the orientation of the viewer (said ***sightline***) [0027]. The display is then oriented based on the sensed information (said ***optimized viewing position***).

In regards to claim **37**, claim 37 recites the same limitations as claim 29. Therefore, the same rationale used for claim 29 is applied.

2. Claims **22** and **25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Manchester (2004/0201595 A1) as applied to claim 18 above, and further in view of Hoon et al. (2002/0186878 A1).

Browning in view of Manchester teaches the limitations of claim 22 with the exception of a analyzing the image of a product to determine if the product is damaged.

Hoon teaches a method/system for analyzing multiple images to locate defects. Fig. 5 illustrates method (500) of Hoon. Once the image data is obtained (502), each set of data is analyzed (504). At step (506), it is determined whether all images are within an acceptable predetermined range (claim **25**) [0038-0046].

It would have been obvious to one of ordinary skill to include the analyzing method of Hoon in order to determine if the product of scanned by the method/system

of Browning is damaged. This would provide further detail of the product in order to assist the party responsible of the product to make further decisions as to how to handle the item.

3. Claim **26-28** is rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Manchester (2004/0201595 A1) as applied to claim 18, and further in view of Melaku et al. (2003-0144793 A1) and Cardno (2004/0036712 A1).

Browning in view of Manchester teaches the limitations of claims 26-28 with the exception of disclosing determining if a product is placed for effective shopping. However, Melaku and Cardno provide a graphical interface that monitors the traffic flow of stores.

The location server database of Melaku, is loaded with a full knowledge of the floor plan. The local server retrieves item information from the local database maps that (X,Y) location to a meaningful indication such as a shelf number in the store [0040]. With reference to Figs. 10, 12, and 14, the display of Melaku presents the user with a graphical representation of many aisles and shelves and the location of items [0058-0062].

It would have been obvious to one of ordinary skill in the art to provide a graphical layout of the product location in order to locate the desired item easily and minimize the time needed to locate the desired item.

With reference to Fig. 3 of Cardno, a display is arranged to display a contoured representation of customer interest points within retail premises [0036]. Further, by viewing representations produced over a time period, a user would be able to recognize trends, or crowds [0066]. Thus, if there is poor traffic flow near around a particular item in a store, the data shows that the item is not correctly placed, and from the data, can place the item where there is less traffic flow.

Therefore, it would have been obvious to one of ordinary skill in the art to implement the traffic monitoring of Cardno with the invention of Browning in order to recognize trends, or crowds [Cardno: 0066], for proper product placement.

(10) Response to Argument

Applicant argues Browning (6,707,581 B1) in view of Manchester (2004/0201595 A1) fails to teach, "*the capture corresponds to inversion or rotation of the system*". Examiner respectfully disagrees. Browning teaches the scan is performed by sweeping the scan head of the handheld scanner across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects. Thus in order to correctly retrieve the correct information related to the barcode, the method/system of Browning must be able to rotate/invert the barcode when the user is holding the handheld scanner at odd angels or even upside down. Thus, it can capture the correct orientation of the barcode regardless of how the user is holding the handheld scanner. Additionally, in a playback mode of Browning, the

retrieved information is displayed to the user immediately upon receipt [col. 5 lines 31-32].

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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